

### **REMARKS**

In the Office Action, the Examiner rejected claims 12, 13, 17-20, 32, 35-39, 41, 50 and 51. Further, the Examiner objected to claims 14-16, 33, 34, and 42-44 for depending from a rejected base claim, but indicated that these claims each contain allowable subject matter. The Examiner also allowed claims 1-3, 5-11, 21-24, 26, and 28-31. Applicants canceled claims 4, 25, 27, 40, and 44-49 in a previous communication. By the present Response, claims 32 and 50 are amended to further clarify the claimed subject matter. Upon entry of the amendments, claims 1-3, 5-24, 26, 28-39, 41-44 and 50-51 will remain pending in the present application. Applicants would like to thank the Examiner for the recognition of allowable subject matter in the present claims. However, for the reasons set forth below, Applicants respectfully submit that all of the pending claims are allowable in their present form. Applicants respectfully request reconsideration of the above-referenced application in view of the foregoing amendments and following remarks.

#### **First Claim Rejection under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 12, 13, 17, 19, 20, 39, and 41 under U.S.C. § 102(b) as anticipated by Van der Ende (U.S. Patent No. 5,822,814). Applicants respectfully traverse this rejection.

#### ***Legal Precedent***

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also

must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

***Omitted Features of Independent Claim 12***

Turning now to the present claims, the Van der Ende reference fails to disclose each element of independent claim 12. For instance, independent claim 12 recites, among other things, “a curvilinear rail structure” and “a limb support *slidingly coupled to the curvilinear rail structure*” (emphasis added). As discussed below, the Van der Ende reference fails to disclose such an element. Consequently, the Van der Ende reference fails to anticipate independent claim 12 and its dependent claims.

The Van der Ende reference is directed to a medical diagnostic apparatus which requires less space to operate. Col. 1, lines 8-17; col. 2, lines 33-45. Accordingly, the Van der Ende apparatus includes a stand 2 and a component support or C-arm 4, which supports X-ray source 10 and X-ray detector 12 in operation. Col. 3, lines 1-8. The C-arm 4 is coupled to a trackway 20, which permits both rotation of the C-arm 4 in its own plane and lateral rotation of the C-arm 4 about a center-line of the C-arm 4. Col. 3, lines 12-15. The trackway 20 is coupled to a carriage 14, which is, in turn, coupled to the stand 2. The Van der Ende apparatus also includes a patient table top 8 that is coupled to the stand 2 via a supporting arm 6. Col. 3, lines 1-5. Particularly, the supporting arm 6 is coupled to the stand 2 via a hinge 24 that permits rotation of the supporting arm 6 and patient table 8 about an axis 25. Col. 3, lines 21-25. Further, the supporting arm 6 may be adjusted upwardly or downwardly via vertical guide 18 to raise or lower the patient table 8. Col. 3, lines 19-21.

In the Office Action, the Examiner incorrectly asserted that the C-arm 4 and the patient table 8 of the Van der Ende reference are equivalent to the curvilinear rail

structure and limb support recited in independent claim 12. However, claim 12 clearly recites “a limb support *slidingly coupled* to the curvilinear rail structure” (emphasis added). As is evident from the cited reference, the patient table 8 is not *slidingly* coupled to any portion of the Van der Ende apparatus; it is fixedly coupled to the support arm 6. Further, even if it could reasonably be argued that the patient table 8 is *slidingly coupled* to the Van der Ende apparatus via the support arm 6 and vertical guide 18, the support arm 6 is, at best, merely slidingly coupled to the stand 2. Because “slidingly coupled” denotes a proximate positional relationship between two elements that allows displacement of one element relative to and along the other, it cannot be reasonably argued that patient table 8 is “*slidingly coupled*” to the C-arm 4. Consequently, the Van der Ende reference fails to teach or suggest “a limb support *slidingly coupled* to the curvilinear rail structure” (emphasis added) and, thus, cannot anticipate independent claim 12. Accordingly, Applicants believe independent claim 12, as well as each of its dependent claims, is patentable over the Van der Ende reference.

***Omitted Features of Independent Claim 39***

Similarly, the Van der Ende reference fails to disclose every recitation of independent claim 39. For example, independent claim 39 recites, in part, “providing a lateral rail structure attachable to a receptor of the medical imaging system” and “*slidingly coupling* a limb support to the lateral rail structure” (emphasis added). However, as discussed above with respect to independent claim 12, the Van der Ende reference fails to disclose such a coupling. As a result, the Van der Ende reference fails to disclose every element of, and cannot anticipate, independent claim 39. Accordingly, Applicants believe independent claim 39, as well as each of its dependent claims, is patentable over the Van der Ende reference.

For these reasons, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 102 and allowance of claims 12, 13, 17, 19, 20, 39, and 41.

**Second Claim Rejection under 35 U.S.C. § 102**

In the Office Action, the Examiner also rejected claims 32 and 35-38 under U.S.C. § 102(b) as anticipated by Rossi (U.S. Patent No. 4,653,083). Applicants respectfully traverse this rejection.

***Omitted Features of Independent Claim 32***

Turning now to the Rossi reference, this cited reference fails to disclose each element of independent claim 32. For instance, independent claim 32, as amended, recites, among other things, “sliding a limb support along a rail structure *directly* coupled to, and movable with, a radiographic receptor” (emphasis added). As discussed below, the Rossi reference fails to disclose such an element. Consequently, the Rossi reference fails to anticipate independent claim 32.

The Rossi reference is directed to an X-ray apparatus that permits independent movement of various components of the apparatus. *See* col. 1, lines 20-28. The Rossi apparatus includes a beam 3 having a linear track 4, in which a primary carriage 6 and a carriage 7 are supported for independent movement along the beam. Col. 2, lines 5-9. An arm 13 connects a patient table T to the carriage 7. *See* col. 2, lines 39-47; *see also* FIG. 2. A radiation carriage 9 is coupled to the primary carriage 6. *See* col. 2, lines 9-14; *see also* FIG. 1. The radiation carriage 9 includes a two-armed support 11, which supports an X-ray tube X and an image intensifier I. Col. 2, lines 14-17.

In the Office Action, the Examiner equated beam 3 and track 4 of the Rossi reference to the rail structure, and image intensifier I to the radiographic receptor, recited in independent claim 32. *See* Office Action mailed October 15, 2004, page 3. However, independent claim 32, as amended, recites “a rail structure *directly* coupled to, and movable with, a radiographic receptor” (emphasis added). As discussed above, the Rossi reference clearly discloses that image intensifier I is coupled to the two-armed support 11,

which is coupled to the radiation carriage 9. Further, the radiation carriage 9 is coupled to the primary carriage 6, which is coupled to the beam 3. It is, therefore, apparent that image intensifier I is not *directly* coupled to beam 3 in the Rossi apparatus. Because these two components are not *directly* coupled to one another, the reference fails to disclose "sliding a limb support along a rail structure *directly* coupled to, and movable with, a radiographic receptor" (emphasis added) as recited by independent claim 32. Consequently, the Rossi reference fails to anticipate independent claim 32. Accordingly, Applicants believe independent claim 32, as well as each of its dependent claims, is patentable over the Rossi reference.

For these reasons, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 102 and allowance of claims 32 and 35-38.

**Claim Rejections under 35 U.S.C. § 103(a)**

The Examiner rejected claims 18, 50, and 51 under 35 U.S.C. § 103(a) as obvious over Van der Ende in view of Conrad et al. (U.S. Patent No. 3,997,792). Additionally, the Examiner also rejected claim 50 under 35 U.S.C. § 103(a) as obvious over Kobayaski (U.S. Patent No. 6,450,684) in view of Conrad et al. Applicants respectfully traverse these rejections.

***Legal Precedent***

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a

convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

***Omitted Features of Independent Claim 50***

Turning again to the claims, independent claim 50 recites, among other things, “a patient support *movably coupled to* the lateral rail structure” (emphasis added). Neither the Van der Ende reference nor the Kobayashi reference, in combination with the Conrad et al. reference, discloses such an element. In view of these deficiencies, the cited references, taken alone or in combination, cannot render obvious independent claim 50 and its dependent claim 51.

First addressing the rejection based on the Van der Ende reference, the Van der Ende reference fails to disclose “a patient support *movably coupled to* the lateral rail structure” (emphasis added) as recited by independent claim 50. As discussed above with respect to independent claim 12, the Van der Ende reference discloses a patient table top 8 fixedly coupled to a support arm 6 at a location at an end of the apparatus distal from the C-arm 4. However, one object “movably coupled” to another object immediately suggests that the two objects interface with, and move with respect to, one another. As discussed above, such a relationship does not exist between the relevant elements of the Van der Ende reference. Thus, the Van der Ende reference fails to disclose each element of independent claim 50. Further, the Conrad et al. reference fails to obviate the deficiencies of the Van der Ende reference. Consequently, the Van der Ende and Conrad et al. references, taken alone or in combination, fail to render independent claim 50 obvious. As a result, Applicants believe independent claim 50, as well as each of its dependent claim 51, is patentable over the Van der Ende and Conrad et al. references.

Second, with respect to the Kobayashi reference, the cited reference also fails to disclose “a patient support *movably coupled to* the lateral rail structure” (emphasis added) as recited by independent claim 50. As is clear in FIG. 6 of the Kobayashi reference, the tabletop 12 is fixedly secured to a support bench 11 by supports 13. Because the tabletop 12 is fixedly secured to the bench 11, it cannot be rationally argued that the tabletop 12 is movably coupled to any object. Applicants note that a first object cannot be “movably coupled” to a second object if the first object is not capable of independent movement; any interpretation to the contrary would be antithetical to the plain meaning of the term. Moreover, Applicants respectfully remind the Examiner that, during patent examination, the pending claims must be given an interpretation that is reasonable and consistent with the specification. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); see also *In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also M.P.E.P. §§ 608.01(o) and 2111. Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. See *In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); see also M.P.E.P. § 2111.

Because the tabletop 12 is fixed in place and incapable of independent movement, the tabletop 12 cannot be rationally equated with a “patient support *movably coupled to* the lateral rail structure” (emphasis added) as recited by independent claim 50. Thus, the Kobayashi reference fails to disclose each element of independent claim 50. In addition, the Conrad et al. reference fails to obviate the deficiencies of the Kobayashi reference. Because of these deficiencies, the Kobayashi and Conrad et al. references, whether taken alone or in combination, also fail to render independent claim 50 obvious. Accordingly, Applicants believe independent claim 50, as well as each of its dependent claim 51, is patentable over the Kobayashi and Conrad et al. references.

***Omitted Features of Dependent Claim 18***

With respect to the rejection of claim 18, as discussed above, the Van der Ende reference fails to disclose every element of independent claim 12, from which claim 18 depends. Further, the Conrad et al. reference fails to obviate the deficiencies of the Van der Ende reference. As a result, claim 18 is allowable on the basis of its dependency from an allowable independent claim, as well as by virtue of the subject matter separately recited in the dependent claim. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claim 18.

For these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103 and allowance of claims 18, 50, and 51.

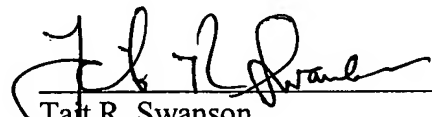


**Conclusion**

In view of the remarks set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Tait R. Swanson  
Reg. No. 48,226  
FLETCHER YODER  
P.O. Box 692289  
Houston, TX 77269-2289  
(281) 970-4545